ANNEX BETWEEN

THE NATIONAL AERONAUTICS AND SPACE ADMINISTRATION AND B/E AEROSPACE, D.B.A.COLLINS AEROSPACE A UNIT OF UNITED TECHNOLOGIES CORPORATION

UNDER SPACE ACT UMBRELLA AGREEMENT NO. SAA-RA-20-30648, DATED March 31, 2020 (ANNEX NUMBER 1).

ARTICLE 1. PURPOSE

This Annex shall be for the purpose of performing standard testing and evaluation of materials and components as required under NASA-STD-6001 Flammability, Offgassing, and Compatibility Requirements and Test Procedures. Approximately 150 standard test requests will be performed under this agreement. WSTF's Standard Testing and Oxygen Analysis team has evaluated materials for spacecraft safety for more than 30 years and provides a unique subject matter and data interpretation expertise, custom specialized equipment needed for testing, and data acceptance qualification. These testing services are not commercially available in the United States and WSTF is uniquely qualified to perform such services. Testing is to be performed in accordance with the test plan provided by B/E Aerospace, d.b.a. Collins Aerospace a unit of United Technologies Corporation ("Collins").

The legal authority for this Annex, consistent with the Umbrella Agreement, is in accordance with the National Aeronautics and Space Act (51 U.S.C. § 20113(e)).

ARTICLE 2. RESPONSIBILITIES

NASA will use reasonable efforts to:

- 1. Review Collins' test plan and concur with shipping the test article(s) to WSTF.
- 2. When necessary, conduct a pre-test meeting with the Collins Technical Point of contact to review the Test Request (WSTF Form 514) and obtain Collins' approval. Test schedule will not initiate until all requirements are finalized and approval is obtained.
- 3. Perform approximately 150 tests in accordance with NASA-STD-6001B and per environmental conditions and special considerations stipulated in the Test Request (WSTF Form 514). Reporting of test data will be spaced at least 1 week apart. The conditions for each test include:
- a. WSTF will notify Partner of any identified issues with the test samples that may affect test results or do not comply with NASA STD-6001B requirements. WSTF will prepare samples upon request by the Partner. Utilization of preparation services may reduce the number of tests allowed under this agreement. Test schedule will not initiate until sample preparation is complete and samples are deemed acceptable by WSTF or, if samples are not deemed acceptable by WSTF, testing may proceed if approved by the Partner

Technical Point of Contact for test. Testing of samples not deemed acceptable may result in non NASA-STD-6001B compliant data.

- b. If there is an initial indication of poor performance, NASA WSTF will stop further work and notify the Partner Technical Point of Contact for further direction. Testing will not proceed until Partner has provided authorization. Delays incurred in obtaining direction will be in addition to the negotiated test schedule. Poor Performing examples include, for NASA STD 6001 Test 7, an initial "dirty" assessment and for NASA STD 6001 Test 17, sample failure.
- c. If overtime hours are required to meet the schedule, NASA WSTF will notify Partner and request approval prior to work. Utilization of overtime may reduce the number of tests performed under this agreement.
- 4. If applicable, provide notification of poor performing samples assessment. Provide final test data, report, and return any remaining test specimens upon completion of each test.
- 5. Provide monthly status to the Collins Technical Point of Contact during testing activity. Notification will be provided upon completion of the test.
- 6. For any verbal notifications made to Collins by NASA, confirm such notification via email to the Collins Technical Point of Contact in a timely fashion.

Collins will use reasonable efforts to:

- 1. Provide NASA with the latest revision of Collins test plan.
- 2. Provide NASA with samples for testing at WSTF if required.
- 3. Provide completed Test Request WSTF Form 514 and prepared test specimens. The specimens will include material identification and Safety Data Sheets (SDS). The quantity of test specimens will be sufficient to meet NASA-STD-6001B Table 3 minimum quantities though additional material andor components are always preferred. Partner will coordinate with WSTF for Use-Simulation testing minimum required material quantities.
- 4. When necessary, support pre-test meetings with NASA WSTF. Test schedule will not initiate until all requirements are finalized and approved on the WSTF Form 514.
- 5. Provide sample acceptance input. If samples are not deemed acceptable by WSTF, testing may proceed if approved by Partner Technical Point of Contact but may result in non NASA-STD-6001 compliant data.
- 6. Provide direction on whether or not to proceed with interpretation if a poor initial high level assessment has been obtained.

ARTICLE 3. SCHEDULE AND MILESTONES

The planned major milestones for the activities for this Annex defined in the "Responsibilities" Article are as follows:

Collins will deliver Test Request (WSTF Form 514) or test 3 weeks prior to test start plan,

and SDS for each test and pre-test meeting

Collins will deliver test specimens. Note: Start of test will not initiate until sample preparation is complete and samples are deemed acceptable by WSTF. If samples are not deemed acceptable by WSTF testing may proceed if approved by the Collins Technical Point of Contact but may result in non NASA-STD-6001 compliant data

2 weeks prior to test start

NASA will perform and complete test per the approved WSTF Form 514.

Within 2 weeks of test initiation

WSTF provides initial high level performance assessment

Within 3 weeks of test initiation

WSTF provides final test data report. Reporting of test data will be spaced at least 1 week apart. Delays incurred in obtaining customer direction on any poorly performing high

Within 4 weeks of test completion

level assessment samples will likely add time to the negotiated test schedule. Complex interpretation required for "dirty" test 7 may require an extended schedule.

WSTF provides notifications of testing

Minimum Monthly

If requested by partner, WSTF will return remaining test specimens to Collins

Within 1 month of final test data report

ARTICLE 4. FINANCIAL OBLIGATIONS

A. Partner agrees to reimburse NASA an estimated cost of \$487,654.67 for NASA to carry out its responsibilities under this Annex. The Partner agrees to provide NASA an initial payment of \$24,173.22 prior to the initiation of work under this Annex. Subsequent advance payments will be scheduled to ensure that funds are resident with NASA before Federal Obligations are incurred in support of this Annex.

In no event will NASA transfer any U.S. Government funds to Partner under this Annex. Payment must be made by Partner in advance of initiation of NASA's efforts on behalf of Partner.

Each payment shall be marked with JSC, WSTF SAA-RA-20-30649, Annex 1, RAN 3269.

B. NASA will not provide services or incur costs beyond the current funding. Although NASA has made a good faith effort to accurately estimate its costs, it is understood that NASA provides no assurance that the proposed effort under this Annex will be accomplished for the estimated amount. Should the effort cost more than the estimate, Partner will be advised by NASA as soon as possible. Partner shall pay all costs incurred and have the option of canceling the remaining effort, or providing additional funding in order to continue the proposed effort under the revised estimate. Should this Annex be

terminated, or the effort completed at a cost less than the agreed-to estimated cost, NASA shall account for any unspent funds within one year after completion of all effort under this Annex, and promptly thereafter, at Partner's option return any unspent funds to Partner or apply any such unspent funds to other activities under the Umbrella Agreement.

ARTICLE 5. INTELLECTUAL PROPERTY RIGHTS - DATA RIGHTS

- A. Data produced under this Annex which is subject to paragraph C. of the Intellectual Property Rights Data Rights Article of the Umbrella Agreement will be protected for the period of two (2) years.
- B. Under paragraph H. of the Intellectual Property Rights Data Rights Article of the Umbrella Agreement, Disclosing Party provides the following Data to Receiving Party. The lists below may not be comprehensive, are subject to change, and do not supersede any restrictive notice on the Data provided.
- 1. Background Data:

The Disclosing Party's Background Data, if any, will be identified in a separate technical document.

2. Third Party Proprietary Data:

The Disclosing Party's Third Party Proprietary Data, if any, will be identified in a separate technical document.

3. Controlled Government Data:

The Disclosing Party's Controlled Government Data, if any, will be identified in a separate technical document.

4. The following software and related Data will be provided to Partner under a separate Software Usage Agreement:

None

ARTICLE 6. TERM OF ANNEX

This Annex becomes effective upon the date of the last signature below ("Effective Date") and shall remain in effect until the completion of all obligations of both Parties hereto, or five years from the Effective Date, whichever comes first, unless such term exceeds the duration of the Umbrella Agreement. The term of this Annex shall not exceed the term of the Umbrella Agreement. The Annex automatically expires upon the expiration of the Umbrella Agreement.

ARTICLE 7. RIGHT TO TERMINATE

Either Party may unilaterally terminate this Annex by providing thirty (30) calendar days written notice to the other Party.

ARTICLE 8. POINTS OF CONTACT

The following personnel are designated as the Points of Contact between the Parties in the performance of this Annex.

Technical Points of Contact

NASA White Sands Test Facility

Jonathan Tylka

Flight Systems Test Engineer

Mail Suite: RF-111 12600 NASA Road Las Cruces, NM 88012 Phone: 575-524-5762 jonathan.m.tylka@nasa.gov B/E Aerospace, d.b.a. Collins Aerospace a Unit of United Technologies Corporation

Interiors/Oxygen & PSU Systems
Bryce Baker

Research Engineer 10800 Pflumm Rd. Lenexa, KS 66215-4061 Phone: 913-323-5957 bryce.baker@collins.com

Legal and Official Notice

Collins Aerospace

150 Oak Plaza Boulevard Winston Salem, NC 27105 Attn: General Counsel, Interiors Cc. Executive Director, Supply Chain

ARTICLE 9. MODIFICATIONS

Any modification to this Annex shall be executed, in writing, and signed by an authorized representative of NASA and the Partner. Modification of an Annex does not modify the terms of the Umbrella Agreement.

ARTICLE 10. <u>SIGNATORY AUTHORITY</u>

The signatories to this Annex covenant and warrant that they have authority to execute this Annex. By signing below, the undersigned agrees to the above terms and conditions.

NATIONAL AERONAUTICS AND

R/F AEROSPACE DRA COLLING

SPACE ADMINISTRATION WHITE SANDS TEST FACILITY	B/E AEROSPACE, D.B.A.COLLINS AEROSPACE A UNIT OF UNITED TECHNOLOGIES CORPORATION
BY:Robert Cort Manager, White Sands Test Facility	BY: Jane Krueger Jane Krueger Executive Director, Supply Chain
DATE:	DATE: <i>March 27, 2020</i>